

IEPR Workshop Preliminary Electricity and Natural Gas Demand Forecast 2014-2024

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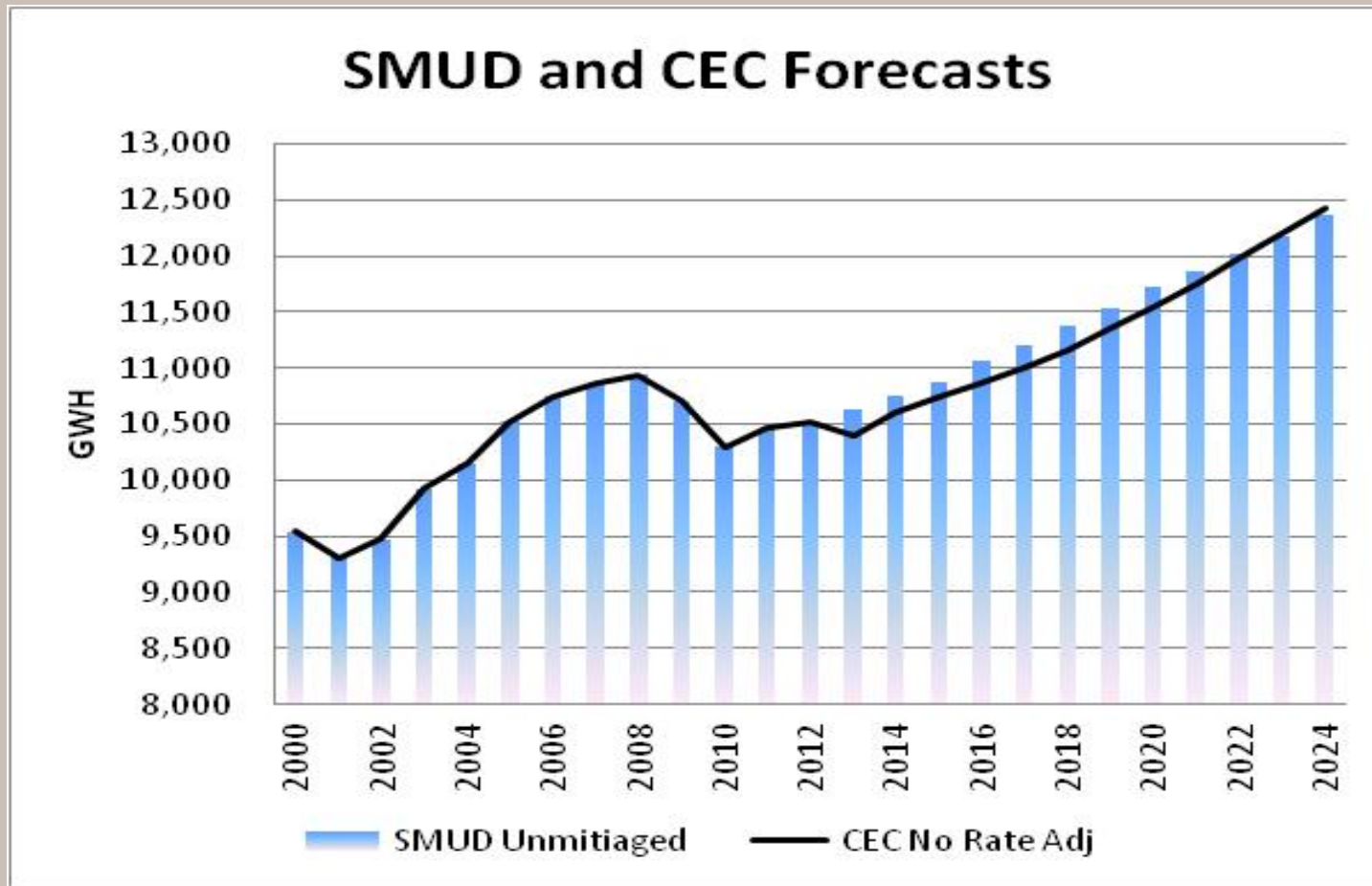
Powering forward. Together.



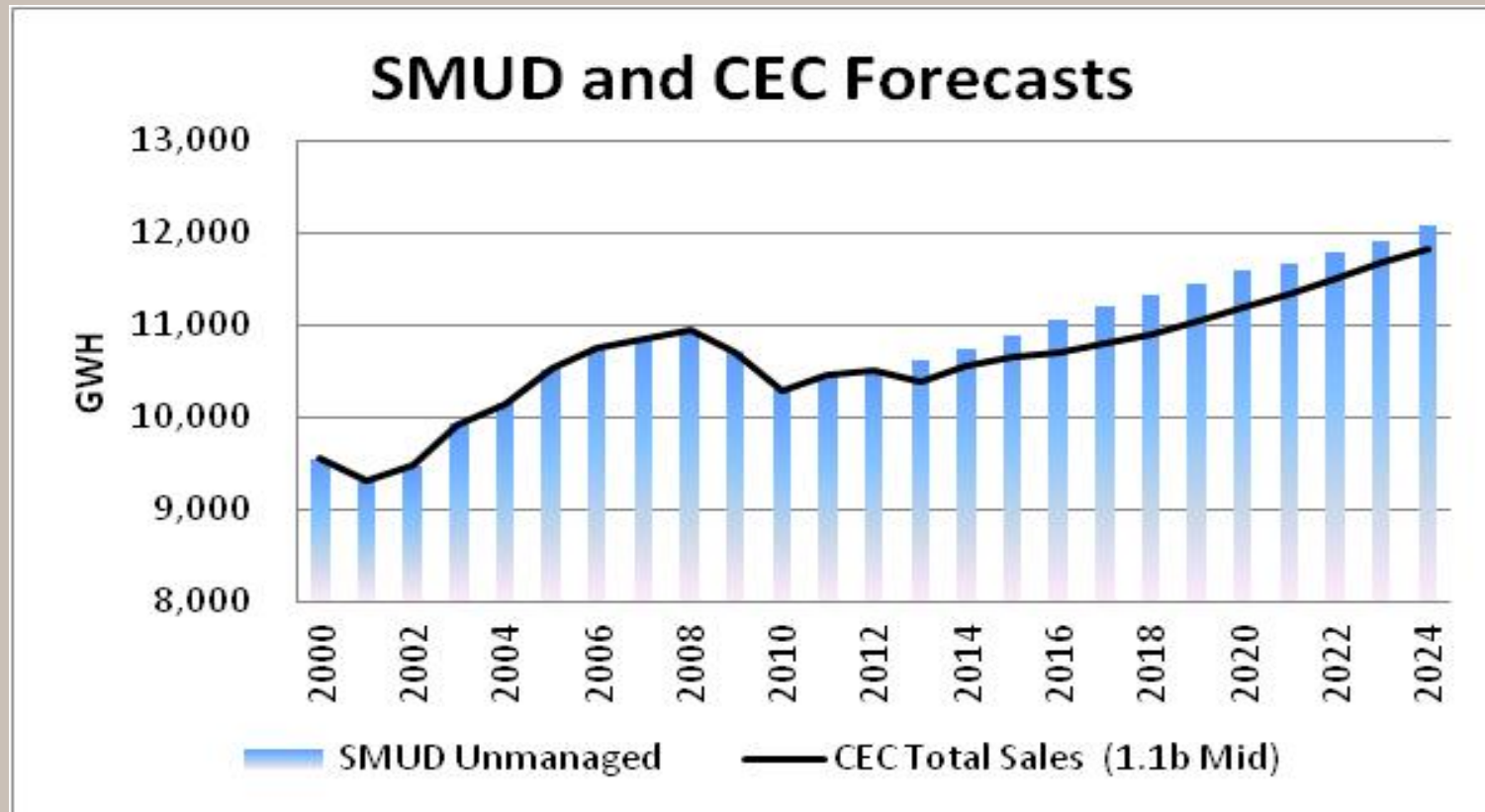
Overview

- CEC MID and SMUD Unmitigated Forecast
- SMUD Unmanaged and Managed Sales Forecast
- SMUD Unmanaged and Managed Peak Forecast
- SMUD Program Impacts

CEC MID and SMUD Unmitigated Forecast Annual Sales

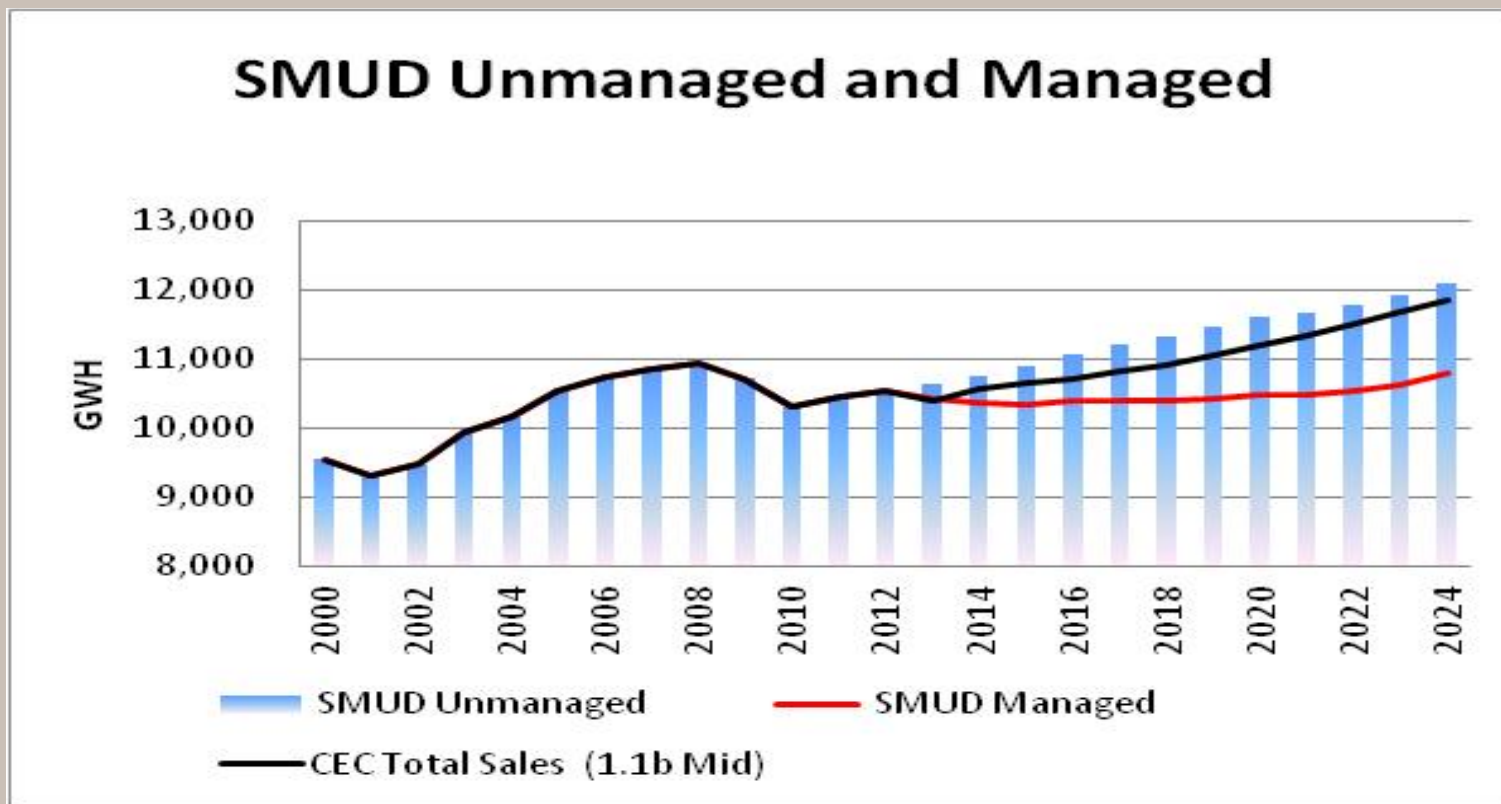


CEC MID and SMUD Unmanaged Forecast Annual Sales



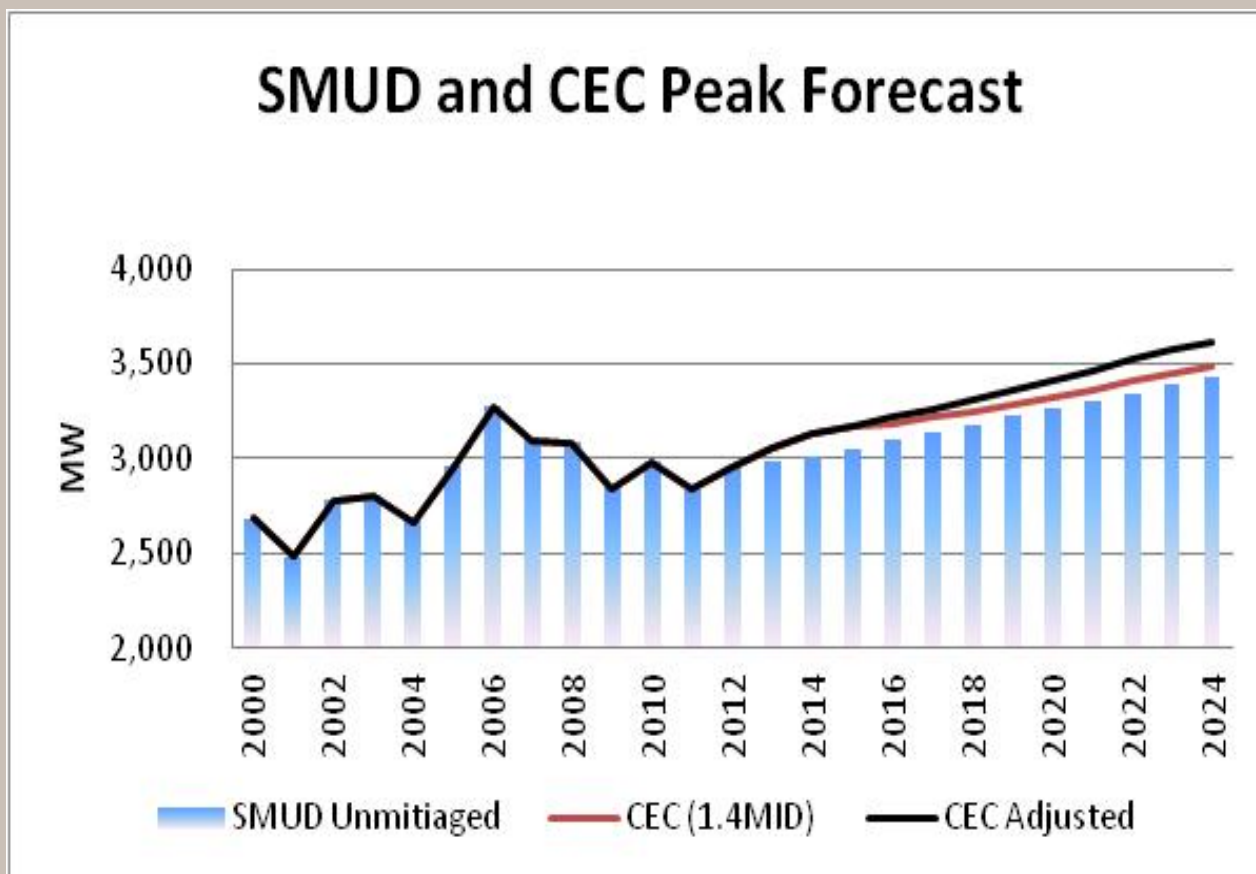
SMUD Unmanaged includes changes in appliance saturations/efficiencies and residential and small commercial new construction

SMUD Unmanaged and Managed Forecast Annual Sales

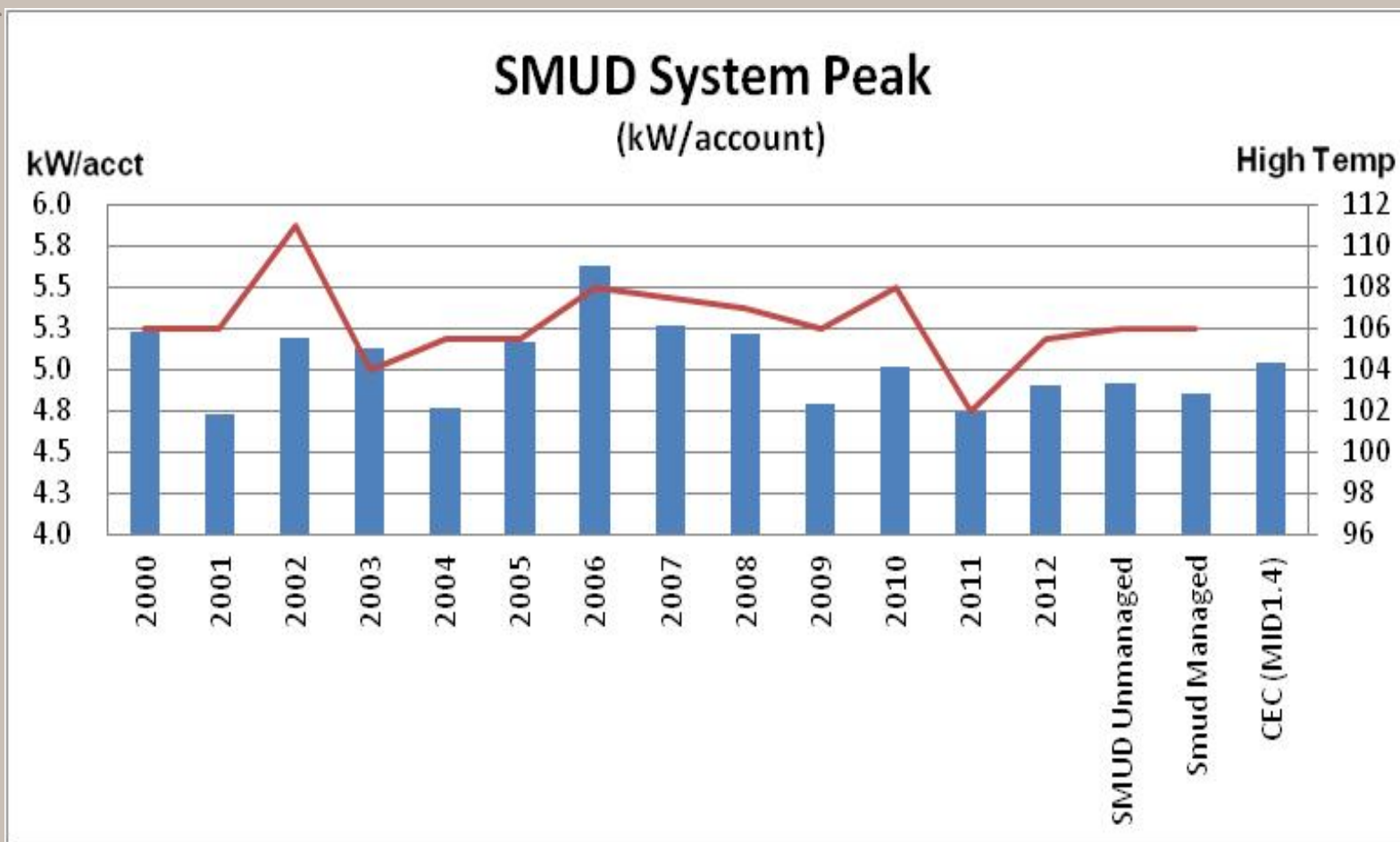


SMUD Managed sales forecast includes program impact for EE, PV-SB1, EV, and departing loads.

CEC MID and SMUD Unmitigated System Peak Forecast

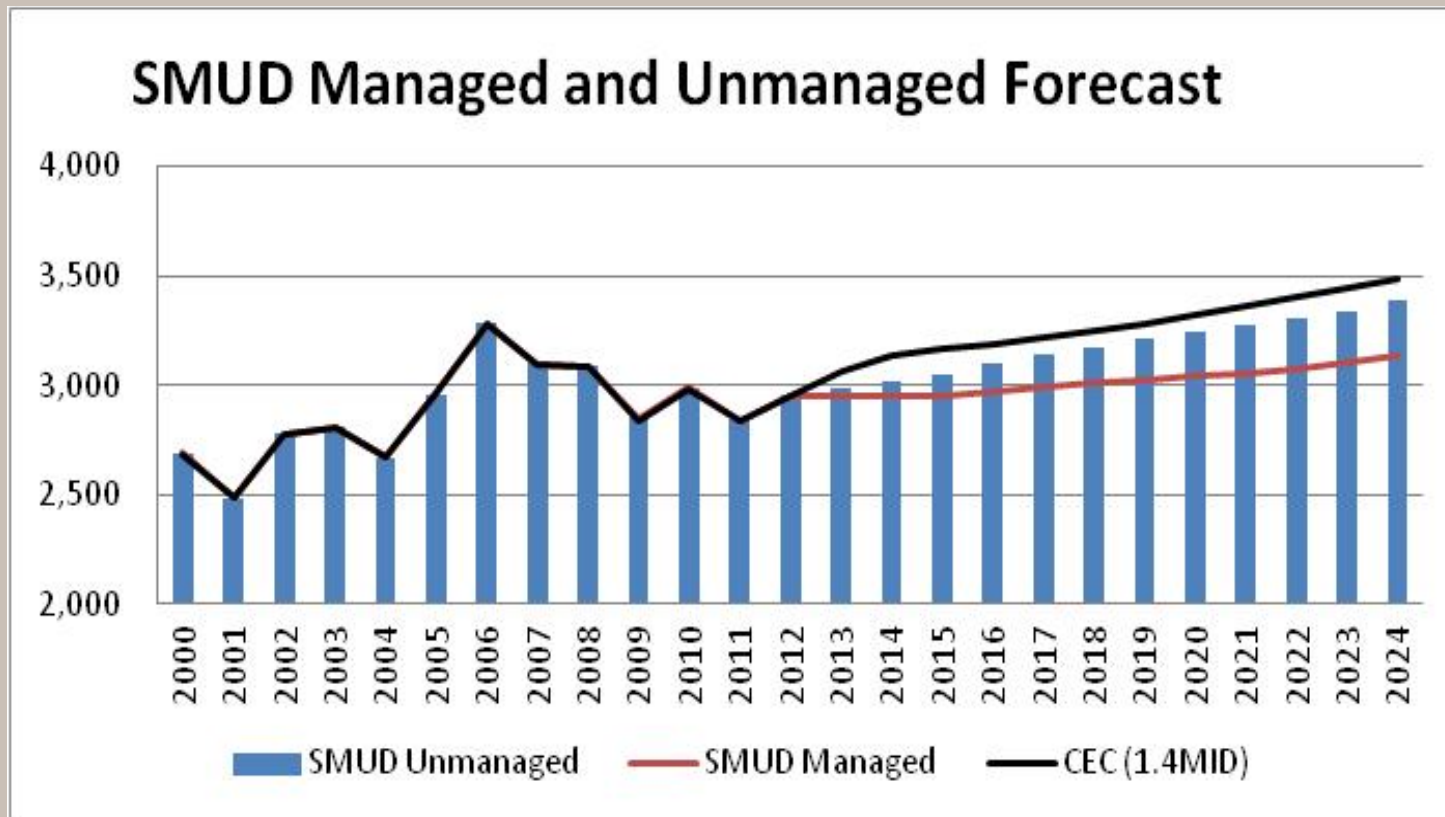


CEC MID and SMUD Unmitigated System Peak Forecast



Note- SMUD unmitigated = SMUD mitigated in 2013

SMUD Unmanaged and Managed System Peak Forecast (MW)



SMUD Unmanaged forecast includes changes in appliance saturations/efficiencies and residential and small commercial new construction

SMUD Managed forecast includes program impact for EE, PV-SB1, EV, and departing loads.

SMUD Unmanaged and Managed Impacts

Sales Impacts

Year	New Construction	SAE Standards	Energy Efficiency	PV-SB1	EV	Departing Load	Total Impacts
2013	0.0%	0.0%	-1.6%	-0.1%	0.0%	-0.2%	-1.9%
2014	0.0%	0.0%	-3.1%	-0.2%	0.0%	-0.3%	-3.6%
2015	0.0%	0.0%	-4.4%	-0.4%	0.1%	-0.3%	-5.0%
2016	0.0%	0.0%	-5.6%	-0.5%	0.2%	-0.3%	-6.2%
2017	0.0%	0.0%	-6.7%	-0.6%	0.3%	-0.3%	-7.3%
2018	-0.1%	-0.3%	-7.6%	-0.6%	0.4%	-0.3%	-8.6%
2019	-0.2%	-0.5%	-8.4%	-0.7%	0.5%	-0.3%	-9.7%
2020	-0.4%	-0.8%	-9.1%	-0.8%	0.7%	-0.3%	-10.6%
2021	-0.5%	-1.2%	-9.6%	-0.9%	0.9%	-0.3%	-11.6%
2022	-0.6%	-1.3%	-10.1%	-1.0%	1.0%	-0.3%	-12.3%
2023	-0.7%	-1.4%	-10.4%	-1.1%	1.2%	-0.3%	-12.7%
2024	-0.8%	-1.3%	-10.6%	-1.1%	1.4%	-0.3%	-12.7%

Peak Impacts

Year	New Construction	SAE Standards	Energy Efficiency	PV-SB1	EV	Departing Load	Total Impacts
2013	0.0%	0.0%	-1.0%	-0.1%	0.0%	-0.1%	-1.2%
2014	0.0%	0.0%	-1.9%	-0.2%	0.0%	-0.1%	-2.2%
2015	0.0%	0.0%	-2.7%	-0.4%	0.0%	-0.1%	-3.2%
2016	0.0%	0.0%	-3.5%	-0.5%	0.0%	-0.1%	-4.1%
2017	0.0%	0.0%	-4.1%	-0.6%	0.0%	-0.1%	-4.8%
2018	-0.1%	-0.2%	-4.4%	-0.7%	0.0%	-0.1%	-5.5%
2019	-0.1%	-0.3%	-4.9%	-0.8%	0.1%	-0.1%	-6.2%
2020	-0.2%	-0.5%	-5.3%	-0.9%	0.1%	-0.1%	-7.0%
2021	-0.3%	-0.8%	-5.6%	-1.0%	0.1%	-0.1%	-7.7%
2022	-0.4%	-0.9%	-5.8%	-1.1%	0.1%	-0.1%	-8.2%
2023	-0.5%	-0.9%	-6.0%	-1.2%	0.1%	-0.1%	-8.5%
2024	-0.5%	-0.8%	-6.0%	-1.1%	0.1%	-0.1%	-8.4%

SMUD Unmanaged and Managed Impacts

Retail Sales (GWH)						
Year	Unmanaged	EE	SB1	EV	Departing Load	Managed
2013	10,630	(171)	(8)	1	(20)	10,432
2014	10,747	(332)	(23)	4	(33)	10,363
2015	10,880	(484)	(40)	12	(33)	10,336
2016	11,066	(625)	(51)	19	(33)	10,376
2017	11,200	(753)	(62)	31	(33)	10,383
2018	11,328	(868)	(74)	44	(33)	10,397
2019	11,447	(972)	(85)	62	(33)	10,419
2020	11,594	(1,065)	(97)	79	(33)	10,479
2021	11,660	(1,144)	(108)	102	(33)	10,477
2022	11,781	(1,211)	(119)	122	(33)	10,540
2023	11,909	(1,265)	(131)	145	(33)	10,625
2024	12,092	(1,306)	(131)	170	(33)	10,793
System Peak (MW)						
Year	Unmanaged	EE	SB1	EV	Departing Load	Managed
2013	2,981	(29)	(2)	0	(4)	2,946
2014	3,013	(57)	(7)	0	(4)	2,946
2015	3,049	(83)	(12)	0	(4)	2,951
2016	3,095	(108)	(15)	1	(4)	2,969
2017	3,141	(130)	(19)	1	(4)	2,990
2018	3,175	(141)	(22)	1	(4)	3,009
2019	3,211	(159)	(26)	2	(4)	3,025
2020	3,241	(173)	(29)	2	(4)	3,038
2021	3,270	(184)	(32)	3	(4)	3,053
2022	3,304	(194)	(36)	4	(4)	3,074
2023	3,341	(202)	(39)	4	(4)	3,100
2024	3,383	(207)	(39)	5	(4)	3,138

SMUD Unmanaged and Managed Impacts

Year	Plug-In Vehicles	Sales (MWH)
2013	450	1,188
2014	1,575	4,158
2015	4,387	11,581
2016	7,200	19,057
2017	11,700	30,883
2018	16,700	44,084
2019	23,450	61,902
2020	29,700	78,617
2021	38,633	101,982
2022	46,367	122,387
2023	54,900	144,911
2024	64,233	170,029
2025	74,367	196,310
2026	85,300	225,171
2027	97,033	256,144
2028	109,700	290,334
2029	125,567	331,465
2030	139,700	368,774
2031	155,424	410,281
2032	172,918	457,722

SMUD Unmanaged and Managed Impacts

<http://energycenter.org/index.php/incentive-programs/clean-vehicle-rebate-project/cvrp-project-statistics>

